

Key Knowledge

Properties of Materials

<p>wood: hard, stiff, strong, opaque, can be carved into any shape.</p>	<p>glass: waterproof, transparent, hard, smooth.</p>
<p>plastic: waterproof, strong, can be made to be flexible or stiff, smooth or rough.</p>	<p>metal: strong, hard, easy to wash.</p>
<p>paper: lightweight, flexible.</p>	<p>cardboard: strong, light, stiff.</p>
<p>fabric: soft, flexible, hard-wearing, can be stretchy, warm, absorbent.</p>	<p>rubber: hard-wearing, elastic, flexible, strong.</p>

Squash an object by pushing both hands together.

Bend an object by grabbing both ends of the object and bringing the ends inwards together.

Twist an object by turning your hands in opposite directions.

Stretch an object by pulling your hands slowly and gently apart.

John McAdam's process was so successful that roads were built in this way right across the world.

Key Skills

- To identify uses of different everyday materials.
- To identify and group the uses of everyday materials.
- To record observations.
- To compare the suitability of different everyday materials.
- To explain how the shapes of objects made from some materials can be changed.
- To explain the process of recycling.
- To know about the inventor John McAdam.

Key Vocabulary

- Shape** – The outline of an object
- Pull** – Bringing something closer
- Twist** – Turn to face a different directions
- Squash** – Making something smaller by pushing
- Bend** – Change so not in a straight line
- Stretch** – To make something longer or wider
- Translucent** – Allows light to pass through
- Reflective** – Bounces light back from the surface
- Flexible** – Able to bend and not break
- Rigid** – Stiff, doesn't bend
- Materials** – Materials are what objects are made from
- Suitability** – Suitability means having the properties which are right for purpose.
- Properties** – This is what a material is like and how it behaves (soft, stretchy, waterproof).